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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-28. Cancelled.

29. (Currently Amended) The dental device of claim ~~4~~³⁸, wherein:

the at least one electromagnetic energy emitting element comprises at least one light source capable of generating electromagnetic energy; and

the dental device further comprises a power supply operably connected to the at least one light source, the power supply providing energy to the light source.

30. (Currently Amended) The dental device of claim 29, ~~38~~ wherein the at least one light source is externally positioned with respect to the dental band.

31. (Currently Amended) The dental device of claim 30, ~~38~~ wherein the at least one electromagnetic energy emitting element comprises at least one optical fiber.

32. (Currently Amended) The dental device of claim 31, ~~38~~ wherein the at least one electromagnetic energy emitting element comprises a layer of woven optical fibers.

33. (Currently Amended) The dental device of claim 1, ~~38~~ wherein the at least one electromagnetic energy emitting element is a light emitting diode.

34. (Currently Amended) The dental device of claim 1, ~~38~~ wherein the at least one electromagnetic energy emitting element is a heat emitting element.

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35. (Currently Amended) The dental device of claim 4, 38 wherein the electromagnetic energy emitting element is an optical fiber panel.

36. (Currently Amended) The dental device of claim 35, 38 wherein light is emitted from a single side of the optical fiber panel with a relatively high intensity.

37. (Currently Amended) The dental device of claim 35, 38 wherein light is emitted from a single side of the optical fiber panel with a relatively high brightness.

38. (Currently Amended) The dental device of claim 1, and further comprising A dental device for exposing teeth to electromagnetic radiation, comprising:

a dental band having a substantially planar configuration, and having a substantially planar surface that is constructed to be at least partially applied and attached to at least one tooth;

at least one electromagnetic energy emitting element attached to the dental band and oriented to emit electromagnetic radiation in a direction away from the substantially planar surface toward a tooth surface; and

a protective layer attached to the dental band and constructed to be at least partially removed to reveal at least one compartment.

39. (Previously Presented) The dental device of claim 38, wherein the at least one compartment is at least partially filled with a dentifrice.

40. (Currently Amended) The dental device of claim 138, and further comprising a dentifrice in proximity to the dental band, the dentifrice comprising a photosensitizer that is at least partially activated upon emission of electromagnetic energy from the electromagnetic energy emitting element.

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41. (Previously Presented) The dental device of claim 40, wherein the dentifrice further comprises an active ingredient.

42. (Previously Presented) The dental device of claim 41, wherein the active ingredient comprises fluoride.

43. (Currently Amended) The dental device of claim 43, and further comprising a dentifrice in proximity to the dental band, the dentifrice comprising a photosensitizer in combination with an active ingredient.

44. (Previously Presented) The dental device of claim 43, wherein the dentifrice is a transparent gel.

45. (Previously Presented) The dental device of claim 43, wherein the active ingredient is caused to be at least partially activated upon the emitting of electromagnetic energy from the electromagnetic energy emitting element.

46. (Previously Presented) The dental device of claim 45, wherein the dentifrice comprises a fluoride containing gel.

47. (Previously Presented) The dental device of claim 45, wherein the dentifrice comprises an anti-caries agent.

48. (Previously Presented) The dental device of claim 45, wherein the dentifrice comprises an antibacterial agent.

49. (Previously Presented) The dental device of claim 39, wherein the dentifrice comprises a desensitizing agent.

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50. (Previously Presented) The dental device of claim 39, wherein at least part of the protective layer is constructed to be peeled off of the dental device to expose the dentifrice.

51. (Previously Presented) The dental device of claim 39, wherein:

at least part of the protective layer comprises a material subject to degradation by enzymes contained in a subject's mouth; and
degradation of the protective layer by the enzymes exposes the dentifrice.

52. (Previously Presented) The dental device of claim 39, wherein the dentifrice comprises a desensitizing agent that can be activated when electromagnetic energy is emitted by the electromagnetic energy emitting element.

53. (Previously Presented) The dental device of claim 39, wherein the dentifrice consists essentially of a fluoride containing gel.

54. (Previously Presented) The dental device of claim 39, wherein the dentifrice comprises an anti-caries agent.

55. (Previously Presented) The dental device of claim 39, wherein the dentifrice comprises an antibacterial agent.

56. (Previously Presented) The dental device of claim 39, wherein the dentifrice comprises a photosensitive agent.

57. (Previously Presented) The dental device of claim 39, wherein the dentifrice comprises an active ingredient sensitive to electromagnetic radiation.

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58. (Previously Presented) The dental device of claim 38, wherein the at least one compartment is at least partially filled with a dentifrice, wherein the at least one compartment comprises a plurality of compartments.

59. (Currently Amended) The dental device of claim ~~438~~ wherein the electromagnetic energy emitting element is an electrochemiluminescent material.

60. (Currently Amended) ~~The dental device of claim 1, wherein the dental device comprises A dental device for exposing teeth to electromagnetic radiation, comprising:~~
~~a dental band having a substantially planar configuration, and having a substantially planar surface that is constructed to be at least partially applied and attached to at least one tooth;~~

at least one electromagnetic energy emitting element attached to the dental band and oriented to emit electromagnetic radiation in a direction away from the substantially planar surface toward a tooth surface; and

a dry chemical heat-emitting material.

61. (Currently Amended) The dental device of claim ~~438~~, wherein the dental device is constructed to emit heat after a user bites down on the dental device.

62. (Currently Amended) The dental device of claim ~~438~~, further comprising a circuit for varying at least one of an intensity, distribution and duration of electromagnetic radiation emitted from the electromagnetic energy emitting element.

63. (Currently Amended) The dental device of claim ~~438~~, further comprising a transparent panel disposed over the electromagnetic energy emitting element.

64. (Currently Amended) The dental device of claim ~~438~~, wherein the electromagnetic energy emitting element includes a non-illuminated side, and the dental device further

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comprises a reflective panel disposed between the electromagnetic energy emitting element and the dental band, so that the reflective panel is positioned against the non-illuminated side of the electromagnetic energy emitting element.

65. (Currently Amended) The dental device of claim 438, further comprising a diffuser panel disposed over the electromagnetic energy emitting element.

66-72. Cancelled.

73. (Currently Amended) The method of claim 7278, wherein:

the step of applying a dentifrice comprises a step of applying a dentifrice containing an agent having at least one of cleaning, sterilizing and whitening properties; and

the step of activating a source of electromagnetic energy comprises a step of activating a source of electromagnetic energy so that electromagnetic radiation is emitted from the at least one optical fiber in a direction toward the subject's teeth.

74. (Currently Amended) The method of claim 7278, wherein:

the step of applying a dentifrice comprises a step of applying a dentifrice containing at least one of a peroxy compound, an oxidoreductase agent, an antibacterial agent, an anti-carries agent, an anti-plaque agent or plaque control activator, an anti-tartar agent, a desensitizing agent, an etching agent, a photosensitizer or a photodynamic therapy photosensitizer, a whitening agent, and a pigment; and

the step of activating a source of electromagnetic energy comprises a step of activating a source of electromagnetic energy so that electromagnetic radiation is emitted from the at least one optical fiber in a direction toward the subject's teeth.

75. (Previously Presented) The method of claim 73, and further comprising a step of the agent being at least partially activated by the electromagnetic radiation emitted from the at least one optical fiber.

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76. Cancelled.

77. (Currently Amended) The method of claim 7673, wherein:

the protective layer is peeled off of the dental device before the dental device is applied to the subject's teeth; and
the applying of the dental device to a subject's teeth is followed by at least part of the dentifrice contacting the subject's teeth.

78. (Currently Amended) ~~The method of claim 76, wherein the applying of the dental device to a subject's teeth is followed by A method for exposing teeth to electromagnetic radiation, the method comprising the following:~~

providing a dental device, which comprises a dental band having a substantially planar configuration, and having a substantially planar surface that is constructed to be applied and attached to at least one tooth of a patient, and at least one optical fiber disposed on or within the dental band;

applying a dentifrice;

applying the substantially planar surface of the dental device to a subject's teeth; and
activating a source of electromagnetic energy so that electromagnetic radiation is emitted from the at least one optical fiber in a direction away from the substantially planar surface and toward the dentifrice, the applying of a dentifrice being followed by applying a protective layer over the dentifrice and the protective layer being degraded by enzymes within the subject's mouth to thereby expose at least part of the dentifrice.

79. (Currently Amended) The method of claim 7278, whercin the step of applying a dentifrice comprises a step of applying a dentifrice to the dental device.

80. (Currently Amended) The method of claim 7278, whrcin the step of applying a dentifrice comprises a step of applying a dentifrice to a subject's teeth.

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81. (Currently Amended) The method of claim 7278, wherein the at least one optical fiber comprises a plurality of optical fibers.

82. (Currently Amended) The method of claim 7278, wherein the dentifrice comprises at least one of a peroxy compound and a fluoride.

83. (Currently Amended) The method of claim 7278, wherein the dentifrice comprises an anti-carries agent.

84. (Currently Amended) The method of claim 7278, wherein the dentifrice comprises at least two of a peroxy compound, an oxidoreductase agent, an antibacterial agent, an anti-carries agent, an anti-plaque agent or plaque control activator, an anti-tartar agent, a desensitizing agent, an etching agent, a photosensitizer or photodynamic therapy photosensitizer, and a whitening agent.

85. (Currently Amended) The method of claim 7278, wherein the at least one optical fiber comprises a layer of woven optical fibers.

86. (Currently Amended) The method of claim 7278, further comprising at least one compartment located on or within the dental band, the at least one compartment constructed to contain a dentifrice with an active ingredient sensitive to electromagnetic radiation.

87. (Previously Presented) The method of claim 86, wherein the at least one compartment is located at a surface of the dental band that is disposed between the at least one optical fiber and the subject's teeth when the dental band is attached thereto.

88. (Previously Presented) A dental device for exposing teeth to electromagnetic radiation, comprising:

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a dental band constructed to be at least partially applied and attached to at least one tooth;
a protective layer attached to the dental band and constructed to be at least partially removed to reveal at least one compartment; and
at least one electromagnetic energy emitting element attached to the dental band and oriented to emit electromagnetic radiation from the electromagnetic energy emitting element toward a tooth surface.

89. (Previously Presented) The dental device of claim 88, wherein the at least one compartment is at least partially filled with a dentifrice.

90. (Previously Presented) The dental device of claim 88, and further comprising a dentifrice in proximity to the dental band, the dentifrice comprising a photosensitizer that is at least partially activated upon emission of electromagnetic energy from the electromagnetic energy emitting element.

91. (Previously Presented) The dental device of claim 90, wherein the dentifrice further comprises an active ingredient.

92. (Previously Presented) The dental device of claim 91, wherein the active ingredient comprises fluoride.

93. (Previously Presented) The dental device of claim 88, and further comprising a dentifrice in proximity to the dental band, the dentifrice comprising a photosensitizer in combination with an active ingredient.

94. (Previously Presented) The dental device of claim 93, wherein the dentifrice is a transparent gel.

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95. (Previously Presented) The dental device of claim 93, wherein the active ingredient is caused to be at least partially activated upon the emitting of electromagnetic energy from the electromagnetic energy emitting element.

96. (Previously Presented) The dental device of claim 95, wherein the dentifrice comprises a fluoride containing gel.

97. (Previously Presented) The dental device of claim 95, wherein the dentifrice comprises an anti-caries agent.

98. (Previously Presented) The dental device of claim 95, wherein the dentifrice comprises an antibacterial agent.

99. (Previously Presented) The dental device of claim 89, wherein the dentifrice comprises a desensitizing agent.

100. (Previously Presented) The dental device of claim 89, wherein at least part of the protective layer is constructed to be peeled off of the dental device to expose the dentifrice.

101. (Previously Presented) The dental device of claim 89, wherein:

at least part of the protective layer comprises a material subject to degradation by enzymes contained in a subject's mouth; and

degradation of the protective layer by the enzymes exposes the dentifrice.

102. (Previously Presented) The dental device of claim 89, wherein the dentifrice comprises a desensitizing agent that can be activated when electromagnetic energy is emitted by the electromagnetic energy emitting element.

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103. (Previously Presented) The dental device of claim 89, wherein the dentifrice consists essentially of a fluoride containing gel.

104. (Previously Presented) The dental device of claim 89, wherein the dentifrice comprises an anti-caries agent.

105. (Previously Presented) The dental device of claim 89, wherein the dentifrice comprises an antibacterial agent.

106. (Previously Presented) The dental device of claim 89, wherein the dentifrice comprises a photosensitive agent.

107. (Previously Presented) The dental device of claim 89, wherein the dentifrice comprises an active ingredient sensitive to electromagnetic radiation.

108. (Previously Presented) The dental device of claim 88, wherein the at least one compartment comprises a plurality of compartments.

109. (Previously Presented) The dental device of claim 88, wherein the electromagnetic energy emitting element is an electrochemiluminescent material.

110. (Previously Presented) A dental device for exposing teeth to electromagnetic radiation, comprising:

a dental band constructed to be at least partially applied and attached to at least one tooth; and

at least one electromagnetic energy emitting element attached to the dental band and oriented to emit electromagnetic radiation from the electromagnetic energy emitting element toward a tooth surface;

wherein the dental device comprises a dry chemical heat-emitting material.

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111. (Previously Presented) The dental device of claim 110, wherein the dental device is constructed to emit heat after a user bites down on the dental device.

112. (Previously Presented) The dental device of claim 110, further comprising a circuit for varying at least one of an intensity, distribution and duration of electromagnetic radiation emitted from the electromagnetic energy emitting element.

113. (Previously Presented) The dental device of claim 110, further comprising a transparent panel disposed over the electromagnetic energy emitting element.

114. Cancelled.

115. (Currently Amended) The dental device of claim ~~114~~110, further comprising a diffuser panel disposed over the electromagnetic energy emitting element.

116. Cancelled.

117. (Currently Amended) The dental device of claim ~~116~~128, wherein the at least one optical fiber comprises a plurality of optical fibers defining an optical fiber panel.

118. (Currently Amended) The dental device of claim ~~116~~128, at least one optical fiber comprising a plurality of optical fibers and the dental device further comprising a power source in communication with the plurality of optical fibers, the power source providing power to the plurality of optical fibers.

119. (Currently Amended) The dental device of claim ~~116~~128, the at least one optical fiber comprising a plurality of optical fibers and the dental device further comprising a circuit for

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